II. BACKGROUND RESEARCH

In accord with Federal and State of Delaware guidelines concerning National Register eligibility for historical resources, this study uses historic contexts to link the project area's history with property types describing the evolution of its built environment. A context outlines levels of historical significance and architectural integrity that identified historical resources must possess in order to be recommended as eligible for listing in the National Register. Subsequent decisions regarding National Register eligibility compare levels of integrity and significance established by the context to the historical significance and architectural integrity of each identified historical resource. The use of historic contexts for the evaluation of National Register eligibility allows for the systematic evaluation of each resource's National Register eligibility based upon the historical evolution of the locale.

The following historic context has been divided into five chronological periods based on periods outlined in the *Delaware Comprehensive Historic Preservation Plan* (Ames et al. 1989). Fieldwork and research activities identified four themes applicable to the historical resources found in the project area. These themes are (a) Agriculture, (b) Manufacturing, (c) Settlement Patterns and Demographic Change, and (d) Architecture, Engineering, and Decorative Arts, which are discussed in each of the chronological periods.

A. Exploration and Frontier Settlement, $1630-1730 \pm$

The project area for the planned improvement is situated where Smiths Bridge Road crosses Brandywine Creek (which is in effect a small river at this location), and thus straddles the boundary between Christiana and Brandywine hundreds in New Castle County (see Figure 1). Christiana and Brandywine are located in the northern part of New Castle County, with the boundaries of both hundreds adjoining the Pennsylvania state boundary. Thus the project area is located within the Piedmont Geographic Zone as defined by the Delaware Comprehensive Historic Preservation Plan (Ames et al. 1989). As the northernmost of the state's five geographic zones, the Piedmont consists of the area lying above the fall line that separates this zone from the Coastal Plain. A nearly level to hilly topography composed of fertile clay soils well suited for agricultural uses characterizes the Piedmont's surface. Early European pioneers noted a rich variety of oak, hickory, poplar, walnut, and ash trees in the Piedmont region prior to extensive land clearance activities. The region's major and minor creeks and streams, including Brandywine Creek, generally drain southeastward into the Christiana River, which flows northeastward before entering the Delaware River at Wilmington (Ames et al. 1989:32-34).

Colonial settlement of northern Delaware began in the early seventeenth century. The first Swedish, Finnish, and Dutch settlers concentrated their homesteads near the Delaware River, basing their settlement's economic life on the fur trade and subsistence agriculture. After England acquired control of the region in 1664, agricultural settlement gradually intensified and moved inland along the region's larger creeks and streams. Before the stream became clogged with silt, the Christiana River provided an important transportation network into hinterland areas as greater areas of land were cleared for the expanding agricultural economy. Settlement of the region increased significantly after William Penn began granting tracts of land in Delaware to English and Welsh immigrants in the 1680s. Brandywine Hundred was organized as a governmental unit in 1687; Christiana Hundred was organized evidently around the same date. The local Friends or Quaker gathering, Center Meeting, was established by 1690, with its meetinghouse sited just southwest of the project area (see Figure 1; Figure 2). Early architectural construction by Europeans consisted primarily of log or frame buildings erected quickly and not intended for permanent use (Ames et al. 1989:45-46; Conrad 1908:449, 469; Herman et al. 1989:4).

FIGURE 2: Project Area Vicinity in 1849

Property types reflecting context themes during this period include non-nucleated agricultural settlements, pioneer trapping and hunting camps, roads, paths, early trails, landings, fords, ethnic impermanent architecture, and early durable buildings. Examples of these property types on the landscape should be considered extremely significant, as they provide information on the earliest settlement of the region. While integrity levels are expected to be low, resources should retain some integrity of materials and location in order to convey their significance

B. Intensified and Durable Occupation, $1730-1770 \pm$

Settlement and agricultural development of the region quickened during the eighteenth century. As population density increased, overland transportation networks were created that joined outlying agricultural areas with larger village centers and engendered further intensive settlement along their routes. The region's agriculture emphasized diversified production on individual farms consisting of wheat and other cereal cultivation, livestock raising, dairying, orchard tending and vegetable gardening. Towards the end of the period, farmers began experimenting with ways to rebuild their fields' fertility (Ames et al. 1989:46; Herman et al. 1989:5-7). Architectural forms during this period primarily consisted of more permanent brick, stone, and log versions of Georgian and ethnic vernacular structures.

Property types indicative of context themes include roads, taverns, inns, villages, durable and permanent buildings, stair-passage dwellings, barns, granaries, and hay barracks. Survival rates and integrity levels for these property types are very low, similar to those from the Exploration and Frontier Settlement period, making surviving examples very significant. Resources documenting these trends should retain sufficient integrity of location, materials, and workmanship to convey information related to their significance.

C. Early Industrialization, $1770-1830 \pm$

Despite heavy silting that denied navigation, the Piedmont's watercourses provided power for mills and early manufacturing. At first used primarily to power gristmills and sawmills, by the early 1800s the area's streams provided water flow for a wide variety of manufacturing establishments, including tanyards, paper mills, woolen mills, carding mills, and spice mills. In 1802, the French emigré and entrepreneur Eleuthere Irénée du Pont began the operation of a gunpowder mill on Brandywine Creek. Partly in response to the mills' demands for workers, nucleated settlements developed surrounding these early industrial centers (Ames et al. 1989:47-49; Herman et al. 1989:9).

With regard to the project area and its immediate vicinity, the mill property, seated on the east bank of the Brandywine at Smiths Bridge, appears to date to this period, if not earlier. According to the historian Scharf, writing in 1888, the gristmill established by the Smith family was "well known in the early part of the [nineteenth] century." Smiths Bridge was first constructed in 1816, though because of floods it had to be rebuilt in 1822, 1828, and 1839. In the last instance of construction, the span took the relatively permanent form of a covered bridge, lasting until destroyed by fire in 1961 (Scharf 1888:907).

Despite continued industrial growth along the Piedmont's rural waterways during much of the nineteenth century, however, agriculture remained the predominant land use throughout the region. By the early nineteenth century very little uncultivated arable land remained in the Piedmont. The progressive agricultural movement emerged as a noteworthy aspect of farming in the region. Farmers increasingly introduced fertilization, systems of crop rotation, and new strains of grass such as clover and timothy. The major field crops remained wheat, barley, and Indian corn, while the raising of beef cattle for market received greater emphasis. With pressure from a growing population, the use of intensified agricultural methods increased, especially as the amount of improved land rose by some 10 percent over the years 1798-1820 and the average size of a farm decreased by more than 30 percent over the same interval (Ames et al. 1989:47-49; Herman et al. 1989:8-9).

The predominant architectural forms in the region during this period continued the trend toward more substantial and permanent construction of Georgian and ethnic vernacular buildings. The most numerous house type constructed was the one-and-a-half-story hall-parlor plan, often with a lean-to kitchen to the side or rear. A common farmstead arrangement (in 31 percent of homesteads according to one count) was that of a dwelling with a single agricultural outbuilding. Homesteads ran the gamut, however, from those consisting of a single house without outbuildings to those with two dwellings and several specific-functioned domestic and agricultural outbuildings. The bank barn, its immediate derivation from the influence of agricultural practices in neighboring Pennsylvania, took its place on the Piedmont landscape during the later years of this period (Herman et al. 1989:9-10).

Property types documenting context themes include roads, bridges, inns, taverns, villages, mills, half-parlor and stair-passage plans, domestic outbuildings, farmsteads, and specific-function farm buildings. Although survival rates for dwellings, taverns, and major agricultural buildings are relatively good, these resources in the Piedmont are under severe development pressure. Property types indicative of these themes should be considered very significant but also must retain higher integrity than resources documenting earlier periods. Resources must possess integrity of location, materials, workmanship, and feeling.

D. Industrialization and Early Urbanization, 1830-1880 \pm

The introduction of improved transportation networks, such as turnpikes and railroads, greatly assisted both farming and manufacturing activities and linked the area with the larger regional economy. Rail access provided farmers with more efficient methods of transporting surplus produce to distant markets, thereby boosting productivity and the cultivation of lucrative cash crops. The Wilmington and Northern Railroad was the second line to open a route through Christiana Hundred, in 1869. Its track, recently the property of the Reading Railroad, passes Smiths Bridge approximately one-fifth (0.2) mile to the west of the bridge (see Figure 1). The Wilmington and Northern established a station at this location on the northwest side of Smiths Bridge Road. The major market commodities for farmers during the period were beef and butter. They also raised substantial quantities of wheat for market (though less than formerly) and of corn, oats, and hay for livestock feed. The movement for agricultural improvement gained further strength due to the everincreasing intensification of cultivation and the accompanying soil erosion, this trend itself a consequence of the ongoing division of farmsteads by inheriting generations in local families (Herman et al. 1989:12; Scharf 1888:885).

Industry began to surpass agriculture as the preeminent sector of the Piedmont economy during these years. Cotton mills, iron-rolling mills, and large-scale slaughterhouses joined the array of industrial establishments located in the region. In addition to furnishing improved transport for the export of finished goods, railroads provided manufacturers with a means to import raw materials not available locally. The railroads also helped focus commercial activities and further settlement in villages and towns with rail stations (Ames et al. 1989:49-51; Herman et al. 1989:12-13).

During this period the region's domestic, industrial, and agricultural architecture all displayed tendencies toward increasing variation as the Victorian eclectic styles proliferated, the local industrial establishments further diversified, and farmers built multifunctional buildings such as barns with basement stables and granaries flanked by attached corncribs (Herman et al. 1989:14).

The first map depicting homestead ownership in the project area vicinity was published by Rea and Price in 1849 (see Figure 2). Six homesteads were located on the present-day properties that lie adjacent to Smiths Bridge, including Isaac Smith's gristmill and sawmill, four other evidently owner-occupied farmsteads, and one tenancy. The second such map, the Beers 1868 state atlas, indicated a total of 10 settlement locations: the mill seat, five additional owner-occupied farmsteads, and four tenancies in the same area (Figure 3). As of 1850, according to the national census of manufactures conducted in that year, Smith's mill was

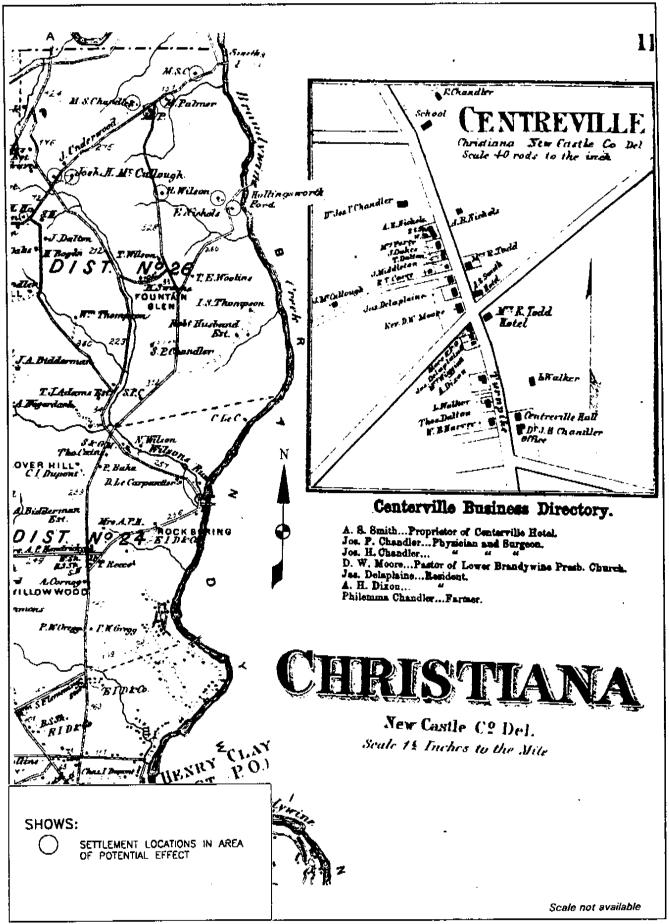


FIGURE 3a: Project Area Vicinity [West Side] in 1868

FIGURE 3b: Project Area Vicinity [East Side] in 1868

SOURCE: Beers 1868

concentrating on the production of flour, grinding 3,000 bushels of wheat per annum to make 660 barrels of flour valued at \$4,000. By 1868 the mill's ownership had been conveyed to Charles and James Twaddell, who owned other rural industrial establishments nearby (Beers 1868; Rea and Price 1849; U.S. Bureau of the Census 1850).

Property types documenting context themes include mills, workers' housing, towns, churches, schools, manufacturing concerns, a variety of nineteenth-century architectural styles, single- and multiple-family dwellings, multifunctional farm buildings, and large dairy barns. Although survival rates for resources of these types are relatively good, especially in comparison with resources from earlier periods, these resources are under development pressure. Integrity levels are relatively high for these resources, requiring integrity of materials, workmanship, design, location, setting, and feeling.

E. Urbanization and Early Suburbanization, 1880-1940 ±

1. General Overview of the Piedmont Region

As the City of Wilmington evolved into the state's largest population and industrial center during the late nineteenth and early twentieth centuries, many of the Piedmont's smaller manufacturing centers languished. The Du Pont Company's fortunes surged during World War I due to the Allied Powers' demand for gunpowder and explosives, leading to a period of expansion for this key firm among the Piedmont's manufacturing concerns. Improved transportation networks, such as electric trolley lines, and the rise of a substantial middle class helped lead to the development of suburbs on former agricultural land in outlying areas surrounding Wilmington. The introduction of the automobile and corollary improvement of the area's road networks further intensified suburban development around Wilmington. A rather specialized form of suburban development was seen in the creation of country house estates for du Pont family members, their associates, and fellow factory owners situated along the Brandywine Creek Valley above Wilmington, chiefly in Christiana Hundred (see discussion below) (Ames et al. 1989:51; Herman et al. 1989:18).

Throughout many areas of the Piedmont, however, chiefly those more distant from Wilmington, the economy continued to rely on agricultural activity. The owners of the estates also followed agricultural pursuits, although with less concern for profitability than the more typical farmer. The emphasis in Piedmont agriculture during this period was on the production of dairy commodities, beef, and, to a lesser degree, wheat and corn (Herman et al. 1989:15-16).

The architectural forms in evidence on the Piedmont landscape during this period included a variety of latenineteenth and early-twentieth-century architectural styles. A common house type in the new suburban developments was the bungalow (Herman et al. 1989:17).

Property types representing context themes include bungalow-type houses and other dwellings representing the architectural styles of the period; country house estate complexes consisting of mansions, servant quarters, tenant houses and specialized outbuildings such as greenhouses and large coach houses or garages; early subdivision developments; factory complexes; bank barns; and truck and dairy farmsteads. Surviving resources representative of early suburbanization are very numerous, and the survival rate for estate buildings also appears to have been fairly high up to the present. Resources related to agriculture and manufacturing, however, are threatened by recent land-use patterns and therefore require the same levels of cultural resource evaluation as those for property types dating to the 1830-1880 ± period.

2. The American Country House, 1890-1940

The du Pont family members and others who created estates in the Brandywine Valley represented the local evocation of a national architectural movement among the wealthiest segment of society. The exponents of the American country house sought to create American rural estates patterned essentially on the aristocratic precedent that still dominated the British countryside. Rural (or often suburban) mansions of heretofore unknown scale began to be built in America circa 1890, when there was a great surge in the number of American millionaires. Such grand houses, although they never became commonplace, were most numerous during the years 1900-1929, especially in certain neighborhoods resembling enclaves located not far outside the major eastern cities. By 1940, economic contingencies ended the era of the American country house.

Although an American precedent might be cited in the eighteenth-century rural mansion houses of Hudson Valley patroons and leading Philadelphia merchants, the antebellum plantation houses of wealthy southern agriculturists, and the suburban villas of well-to-do Americans of the 1850s and onward, the country houses created for rich industrialists after 1890 represented a real departure. Their sheer size, their accompanying estates with elaborate landscaping and numerous outbuildings and structures designed to facilitate the enjoyment of "the good life," and the fact that their very existence was not derived from any rural economic basis made them something quite different from any previous architectural developments that had occurred before in this country. This last element also constituted the most significant difference between the American country houses and the British estates they emulated. The British estates were situated, in fact deeply rooted, amid rural communities to which they bore a centuries-old relationship of landlord and ruler to tenant and constituent. In America, although neighborly and economic relations were generally maintained at some level, the essential separation between the estate and its surrounding rural community of more modest circumstances might be said to have formed one of the American estate's most identifiably "American" attributes (Aslet 1990:19-21; Hewitt 1990).

The major aspects of the cultural underpinning of the establishment of such rural estates in America included the impulse among the wealthy to manifest their separateness from American society at large via emulation of the British aristocracy, the desire to create an appropriate setting for lavish and extended entertaining, and, not least, the yearning to realize a physical environment for family life that would be removed from the industry that was the source of wealth and close to nature with all its salubrious, nurturing, and inspirational qualities. The sheer scale of the real estate acquisition and construction that was generally involved in building these estates went far to separate their owners from the mainstream of the population, whether or not they assumed any aristocratic pretensions. Spaces and facilities for entertaining took the form of numerous bedrooms, the provision of several rooms devoted to socializing that might include a ballroom, the availability of an extensive kitchen-and-pantry suite, and recreational facilities such as a swimming pool, a riding stable, and tennis courts. The private musicale was then a standard form of entertainment in a domestic setting, and this kind of party was enhanced in the country house by the widespread presence of the house organ. The Aeolian-Skinner Organ Company made a specialty of this instrument, a counterpart of the organs that the company installed in theaters all over the country during the same period (Aslet 1990:20, 85, 97-98; Hewitt 1990).

The attempt to achieve a closeness with nature was reflected in at least two facets on the American country house estate: gardening and formal landscaping, and productive agriculture. Two additional aspects of the country house movement should be noted in this regard. First, the "nature" yearned for seems to have been of a relatively tame, cultivated sort; and second, despite the name, many of the estates were actually created in suburban settings on tracts as small as about twenty acres. On a property of such modest scale, a skilled landscape architect could still contrive a feeling of rural spaciousness. A country house might be surrounded by several discrete gardens and lawns reminiscent of the parks of British estates. Many rural American estates boasted extensive and elaborate farmstead areas on which farm commodities, most often those derived from livestock such as dairy products and beef, were raised. The farm's products went to market as well as

to the owner's table, and agricultural competition via county fairs and other venues was often a fairly serious pastime of the estate owner (Aslet 1990:21, 135-49; Hewitt 1990:153-90).

The architectural complex of a country house estate of the period 1890-1940 could consist of numerous buildings and structures. Common components in addition to the mansion itself included dormitory-like servant quarters and tenant houses for single families, swimming pools, tennis courts and other recreational facilities, a greenhouse, a coach house or garage, water towers, and farm buildings. The predominant choice of architectural style among country house owners was Colonial Revival with its patriotic American quality, although Queen Anne, Tudor, Chateauesque, Beaux Arts, French Eclectic, and Italian Renaissance were also used (Aslet 1990:20, 85).

The Brandywine Valley, defined to include small portions of Chester and Delaware counties of Pennsylvania in addition to Christiana and Brandywine hundreds in New Castle County, began to emerge in the opening decade of the twentieth century as one of America's noteworthy country house neighborhoods. In 1902 three du Pont cousins, Pierre S. du Pont II (1870-1954), T. Coleman du Pont (1863-1930), and Alfred I. du Pont (1864-1935), purchased a controlling interest in the Du Pont Company, setting the stage for a thorough and successful reorganization of the firm, which led to an expansion in which great fortunes would be generated. Pierre created Longwood, an estate in Pennsylvania famous for its gardens, and Alfred built Nemours in Delaware. The enhanced profitability of the company was soon reflected in the country house properties of numerous du Pont family members (Aslet 1990:87; Quimby 1988:3-4).

3. The Project Area Vicinity

The county atlas compiled in 1893 by Baist depicted 12 settlement locations in the area encompassed by the present-day properties lying adjacent to Smiths Bridge (Figure 4). These included the mill seat, the Smiths Bridge Railroad Station, eight other evidently owner-occupied homesteads, and two tenancies. By 1888 the gristmill had been acquired by William P. Talley. According to historian Scharf, at that date the mill, "though not operated extensively, is still a public convenience," suggesting that it was being run on a custom basis for local people's feed and commeal rather than as a commercial flour mill. Although Talley's Mill was indicated on the 1893 map, by 1907 historian Conrad could report that it had followed most of its counterparts in the Piedmont region out of business (Baist 1893; Conrad 1908:457; Scharf 1888:907).

The project area vicinity was transformed by the arrival of Irénée du Pont (1876-1963) and his family in 1921. An active employee of the Du Pont Company since 1903, Irénée had risen to prominence as lieutenant to his elder brother Pierre S. II when the latter engineered a second takeover of the firm in 1915, displacing cousins T. Coleman du Pont and Alfred I. du Pont from the corporate leadership. Irénée du Pont served as president of the company from 1919 to 1926. During the years 1921 to 1923, Irénée du Pont created the Granogue Estate, purchasing all of the project area land on the Christiana bank of the Brandywine. Smiths Bridge Railroad Station was renamed Granogue Railroad Station. Du Pont acquired five contiguous farm properties totaling approximately 600 acres, although in 1933 he conveyed one of the farmsteads with 103 acres, located mostly on the northwest side of Smiths Bridge Road, to a daughter. Built atop a high knoll from which it surveyed miles of northern Delaware countryside, the Granogue house, completed in 1923, was perhaps the largest and most grandly situated of the du Pont mansions (Dorian 1962:263-66; Irénée du Pont, Jr., personal communication 1999; New Castle County Department of Land Use; Quimby 1988:25; Winkler 1935:308-13).

F. The Piedmont After circa 1940

Since the end of World War II in 1945, the Piedmont has experienced continued suburban growth and extensive development. Much of the region's former agricultural land is now the locus for tract housing. Associated development of strip- and mega-mall complexes, designed to accommodate the commercial needs

of area residents unwilling to travel to congested urban or town centers, has also swallowed up large areas of former farmland. Business parks and research laboratories have also relocated to formerly rural areas, engendering further suburban development and transforming the Piedmont's landscape.

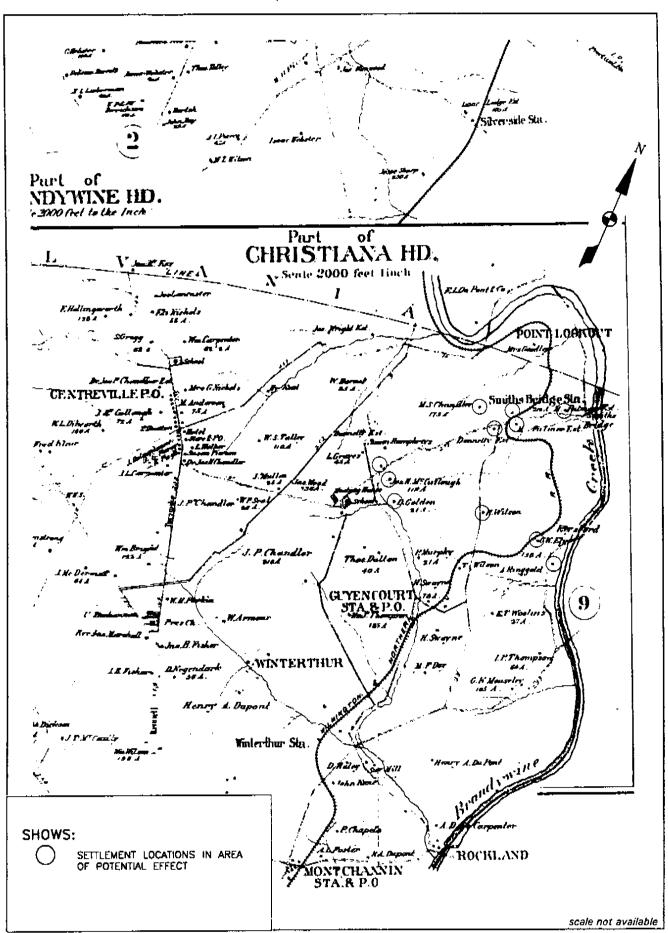


FIGURE 4a: Project Area Vicinity [West Side] in 1893

